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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,233

01/21/2004

Kia Silverbrook

MPA09US

2195

24011 7590 08/14/2007  
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393 DARLING STREET  
BALMAIN, 2041  
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EXAMINER

MARTIN, LAURA E

ART UNIT

PAPER NUMBER

2853

MAIL DATE

DELIVERY MODE

08/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/760,233

Applicant(s)

SILVERBROOK ET AL.

Examiner

Laura E. Martin

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2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (US 6439908) in view of King et al (US 6457810).

#### **Silverbrook discloses the following claim limitations:**

As per claim 1: at least two printhead modules (figure 15, element 10) each comprising at least two printhead integrated circuits (figure 2, element 18), each of which has nozzles formed therein (column 3, lines 44-50) for delivering printing fluid into the surface of print media, and a support member (figure 3, element 32) commonly supporting the printhead integrated circuits of the respective printhead module and having at least one longitudinally extending channel (figure 7, element 80) and associated apertures (figure 7, element 42) for distributing printing fluid to the supported printhead integrated circuits; and a casing (figure 2, element 14) in which the at least two printhead modules are removably mounted in a linearly aligned relationship through removable engagement of the support member of each printhead module with a support frame of the casing (if the support frame can be assembled into the printer, it can be removed); wherein the assembly has an aggregate length and a number of printhead

modules predetermined to provide for selected pagewidth printing (figure 8, element 72).

As per claim 2: each of the printhead modules has sixteen printhead integrated circuits (column 3, lines 49-50).

As per claim 3: the at least two printhead modules (figure 15, element 10) are each formed as a unitary arrangement of the at least two printhead integrated circuits (figure 2, element 18), the support member (figure 3, element 32), the electrical connector (column 3, line 59-65), and the at least one fluid distribution member (figure 7, element 30) mounting the at least two printhead integrated circuits to the support member.

As per claim 4: each printhead module of the at least two printhead modules has end portions which permit interconnection of the linearly aligned printhead modules and provide for fluid connection (figure 2, element 16) of the channels thereof (figure 2).

As per claim 5: the end portions of each of the printhead modules comprise complementary female (figure 10, element 38) and male (figure 10, element 42) end portions.

As per claim 6: a sealing adhesive provided at the interface of the interconnected printhead modules (figure 1, element 84).

**Silverbrook does not disclose the following claim limitations:**

As per claim 1: a one piece support member, a casing in which the at least two printhead modules are arranged so as to be removably mounted in linearly aligned

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relationship, the support members of the modules being configured to communicate the printing fluid with one another.

**King et al. discloses the following claim limitations:**

As per claim 1: a one piece support member (figure 2, element 14), a casing in which the at least two printhead modules are arranged so as to be removably mounted in linearly aligned relationship, the support members of the modules being configured to communicate the printing fluid with one another (figure 2, element 14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Silverbrook et al. with the disclosure of Silverbrook in order to create a higher quality printing apparatus.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (US 6439908) and Silverbrook et al (US 20020180834), and further in view of Lu et al. (US 20030007042).

Silverbrook et al. discloses a sealing adhesive; however, it does not disclose the sealing adhesive being epoxy.

Lu et al. discloses the sealing adhesive being epoxy [0002].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printhead assembly taught by Silverbrook et al. as modified with the disclosure of Lu et al. in order to create a more durable apparatus with continuous ink flow.

***Response to Arguments***

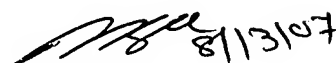
Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura E. Martin

  
MANISH S. SHAH  
PRIMARY EXAMINER